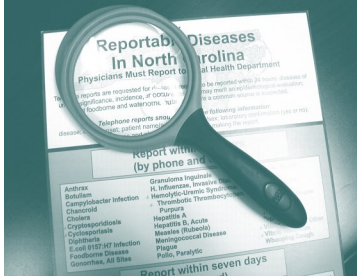


# Communicable Disease Update

MECKLENBURG COUNTY HEALTH DEPARTMENT



## Disease Detectives

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[www.meckhealth.org](http://www.meckhealth.org)

This periodical is written and distributed by the Communicable Disease Program of the Mecklenburg County Health Department for the purpose of updating the medical community in the activities of Communicable Disease Control.

Freda Grant, Beth Quinn  
Brian Lackey, Taleba Parris  
Editors

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## Zika Virus Guidance



Zika is a mosquito-borne virus which has been around since 1947, but recently has been responsible for a large outbreak in Brazil involving reports of infected women giving birth to babies with birth defects. Thus far there are 24 countries identified as being affected, with most of the transmission occurring in Central and South America. Only travel associated cases have been identified in the U.S. and no cases have been reported in North Carolina.

Approximately 1 in 5 people infected with Zika become ill and symptoms usually begin 3-12 days after exposure and last between 2 and 7 days. Symptoms include mild fever, rash (mostly maculopapular), headaches, arthralgia, myalgia, and non-purulent conjunctivitis. Patients can remain viremic up to 7 days after symptom onset. These symptoms are similar to Dengue and Chikungunya which are found in many of these same geographic regions.

There is no vaccine or specific antiviral treatment available for Zika virus. Because of similar geographic distribution and symptoms, patients with suspected Zika virus infections should also be evaluated for possible Dengue and Chikungunya infection. Treatment for all three is generally symptomatic including rest, fluids and use of acetaminophen. Aspirin and other non-steroidal anti-inflammatory drugs should be avoided until Dengue is ruled out to reduce the risk of hemorrhage.

Due to reports of microcephaly and other poor outcomes in babies of mothers infected with Zika while pregnant, CDC has recommended pregnant women postpone travel to affected areas or if unavoidable to consult with their healthcare providers first and strictly adhere to guidelines to avoid mosquito bites during the trip. Healthcare providers should ask pregnant patients about recent travel. Asymptomatic pregnant women reporting travel to any of the affected areas at any time during their pregnancy should have at least one ultrasound to screen for fetal microcephaly and intracranial calcifications.

**Testing should be conducted in consultation with state or local public health for;**

- Asymptomatic pregnant women with ultrasound findings of fetal microcephaly or intracranial calcifications and travel to an affected area;
- Pregnant women who have traveled to affected areas and develop symptoms within two weeks of travel;
- Any non-pregnant person who presents with symptoms within two weeks of travel to an affected area.

Approval is required for testing which is not available at any commercial laboratory and must be done by the CDC lab in Atlanta. Providers will need to call the Communicable Disease Program at the Mecklenburg County Health Department to arrange for testing or to report any suspected cases of Zika virus infection.

For the most up to date CDC guidance go to: <http://www.cdc.gov/zika/index.html>  
Or contact Belinda Worsham RN at 704-336-5490



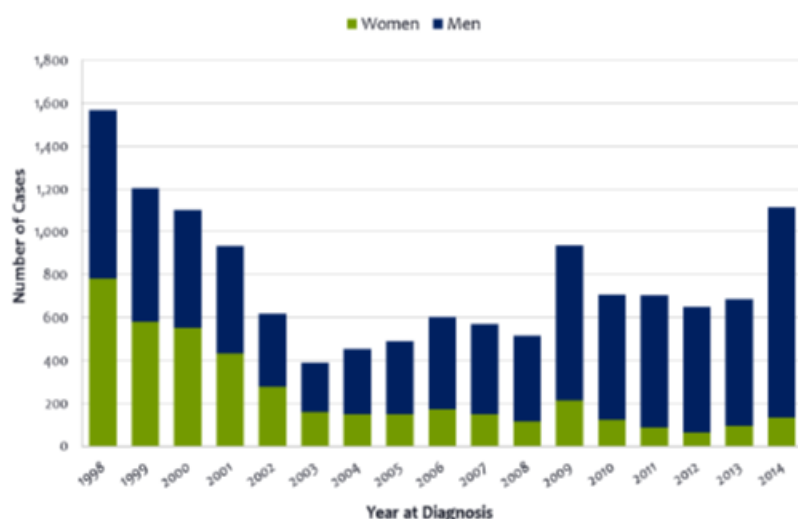
# Syphilis Infections in North Carolina

## Reported Syphilis Case Data, 2014



Reported syphilis infections have increased rapidly over the past few years.

### Syphilis Infections by Gender and Diagnosed Year 2005-2014



#### In 2014:

- 1,113 early syphilis (primary, secondary, and early latent syphilis) infections were diagnosed in North Carolina. This is a 62% increase from 2013, where only 688 early syphilis infections were reported.
- Severe clinical outcomes are being seen (see page 2).

#### Want More Information?

**HIV/STD Facts and Figures website:**  
<http://epi.publichealth.nc.gov/cd/stds/figures.html>

**Centers for Disease Control and Prevention (CDC) Fact Sheet on Syphilis:**  
<http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm>

#### Contact Us

North Carolina  
DHHS  
Communicable  
Disease Branch

Phone:  
(919) 733-3419

**Mailing Address:**  
 Communicable  
Disease Branch  
Epidemiology  
Section  
1902 Mail Service  
Center  
Raleigh NC 27699-1902

Created by the HIV/  
STD Surveillance  
Unit 12/16/2015

Syphilis is increasing in many different groups. The majority of cases are among men, many of whom have HIV.



51% of new infections in men were in young men (30 years or younger)



59% of new infections in men were in Black/African American men



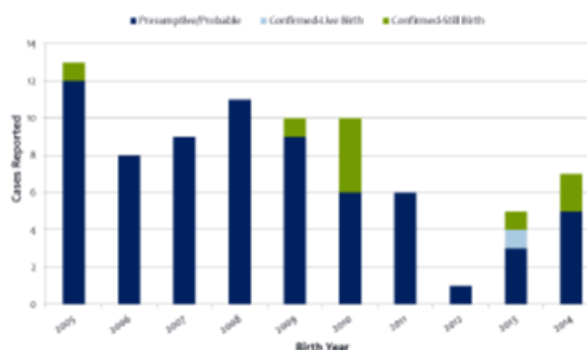
48% of infections in men were in men with HIV

Syphilis among women and congenital syphilis are also increasing.

### Syphilis Rates among Women, 2012-2014



### Congenital Syphilis Cases by Birth Year 2005-2014







## Syphilis Infections in North Carolina Reported Syphilis Case Data, 2014



### Severe Outcomes with Untreated Syphilis

- In North Carolina, there has been an increase in reported ocular syphilis cases, including those presenting with severe or complete vision loss.
- Congenital syphilis can be prevented by adhering to syphilis testing and treatment recommendations during pregnancy. The existence of congenital syphilis cases means that syphilis screening during pregnancy must be improved. Pregnant women should be tested throughout pregnancy (at first prenatal visit, between 28 and 30 weeks, gestation and at birth).

### What CLINICIANS can do

- If you see patients who are sexually active and have visual changes or complaints, test for syphilis and refer patient for immediate ophthalmologic evaluation.
- Ensure that pregnant women receive full syphilis screening (first and third trimesters and at delivery).
  - ◊ Testing for syphilis during first and third trimesters allows the mother to be treated prior to birth and can prevent congenital syphilis
  - ◊ Testing at delivery ensures that all potential congenital syphilis infections are identified and treated appropriately
- Screen syphilis patients for other sexually transmitted diseases (STDs), including HIV.

### What is North Carolina doing to decrease syphilis infections?

- Program alerts are sent out to medical providers as new information is available.
- State and local health departments are collaborating to increase local awareness and train local providers.
- More information about testing for syphilis, especially among pregnant women can be accessed at: [North Carolina testing recommendations](#)

### Program Alert Example



### What YOU can do

- If you are sexually active make sure your care provider is offering you regular screening for all STDs.
- If you have vision problems and are sexually active, mention syphilis to your clinician.
- If you are diagnosed with syphilis, notify your sexual partners of the need to seek testing and treatment.

### Recommendations from the CDC 2015 STD Treatment Guidelines:

- Penicillin G is the preferred drug for treating people in all stages of syphilis.
- If allergic to penicillin, non-pregnant patients can be treated with doxycycline, while pregnant women must be desensitized to penicillin.
- Preparation, dose, and length of treatment depends on the stage and clinical manifestations of syphilis.
- People with HIV and primary or secondary syphilis should be evaluated for treatment failure at 3, 6, 9, 12, and 24 months after treatment.

### Data Source:

North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of July 6, 2015).

State of North Carolina •  
Pat McCrory, Governor  
Department of Health and Human Services •  
Richard O. Brajer, Secretary  
Division of Public Health •  
Megan Davies, M.D., Acting  
State Health Director  
HIV/STD Surveillance Unit  
[www.ncdhs.gov](http://www.ncdhs.gov) •  
[www.publichealth.nc.gov](http://www.publichealth.nc.gov)

Created by the HIV/STD  
Surveillance Unit  
12/16/2015

## Health Department Recognitions



The Red Pump Project selected Hannah Stutts as the 2015 recipient of the Red Pump Award for being an incredible advocate in the fight against HIV/AIDS. Each year The Red Pump Award is awarded to an exceptional woman leader doing productive and meaningful work for HIV/AIDS education, while making substantial contributions to the community through her individual efforts.

Hannah was recognized during the 7th Annual Red Pump/Red Tie Affair on December 5 in commemoration of World AIDS Day.

Hannah Stutts is a Community-based Testing Grant Coordinator with the Mecklenburg County Health Department, working since 2009 in the area of HIV/AIDS education and awareness. She has devoted her career to HIV advocacy, currently serving as a member of the North Carolina HIV Prevention and Care Advisory Council and the Mecklenburg County HIV Council, as well as the Mecklenburg County Diversity Council. Stutts has also helped to organize the annual AIDS Walk in Charlotte, co-chairing the walk in 2013 and 2014.

Hannah Stutts is the founder of the Voices Project, in collaboration with RAIN that provides an avenue for those infected with, and affected by, HIV/AIDS to share their stories with the public.



Welcome Kristi McKray to the Community Health Division. She grew up in North Carolina and graduated from South Mecklenburg High School. She received her degree as a Certified Medical Office assistant and began working at the Mecklenburg County Health Department in 1981 in the Sexually Transmitted Disease Clinic.

Kristi pursued a career in nursing in 1998 and graduated in 2001 from Central Piedmont Community College. She obtained her BSN from Gardner Webb in 2004. After graduation in 2001 she began working as a nurse at the Health Department in ACCESS Program (Area Mental Health Services for the Homeless). Her work experience at the Health department includes many areas: STD, TB, Data Entry as MOA, and School Health/Administrative Assistant and School Health Assistant. In 2003 she began working as a RN case manager in TB control from 2004 - 2015 she was promoted to TB Nurse Supervisor.

In October 2015 Kristi McKray joined the Community Health Division as a Senior Health Manager over HIV/STD Surveillance.

## Recommendations for Control of Norovirus in Healthcare Facilities

The following are some of the best ways to protect yourself from Norovirus:

- Proper handwashing with soap and water, especially after toileting, as well as before preparing and eating meals. Alcohol based hand sanitizers are ineffective against Norovirus
- Rinse all fruits and vegetables, make sure oysters, and shellfish are thoroughly cooked before consuming
- Persons with Norovirus symptoms should not prepare food for others while they are ill, and for at least 48 hours after they no longer have Norovirus symptoms
- Wash laundry thoroughly: Clothing and linens that are contaminated with vomit or stool should be washed with laundry detergent then machine dried. Rubber or disposable gloves should be worn while handling soiled clothes and linen, then wash your hands immediately with soap and water after handling
- Two or more cases of suspected Norovirus should be immediately reported to the Mecklenburg County Health Department Communicable Disease Control Program

- On December 15, 2015 the North Carolina Division of Public Health released updated guidance for disinfecting surfaces that have been contaminated with Norovirus. Bleach solutions should be prepared daily.

After vomiting or having diarrhea, immediately clean and disinfect contaminated surfaces. Use a chlorine bleach solution with a concentration of 1000-5000 ppm (5-25 tablespoons of household bleach [5.25%] per gallon of water) or other disinfectant registered as effective against Norovirus by the Environmental Protection Agency (EPA).

For more information go to :

<http://epi.publichealth.nc.gov/cd/diseases/norovirus.html>

<http://www.cdc.gov/norovirus/preventing-infection.html>

For additional information contact Brian Lackey, RN at 704.336.5498 or

[Brian.Lackey@MecklenburgCountyNC.gov](mailto:Brian.Lackey@MecklenburgCountyNC.gov)



## Wily Old Pathogen Up to New Tricks: Ocular Syphilis

Laura H. Bachmann, MD MPH (Wake Forest University School of Medicine)  
Stephen R. Keener, MD MPH (Mecklenburg County Health Department)



Syphilis is an ancient disease that was thought to be near elimination in the early 2000s. Unfortunately, the recently released 2014 CDC STD Surveillance Report makes it abundantly clear that syphilis—and other sexually transmitted diseases (STDs) such as gonorrhea and chlamydia—continue to present real threats to American society (<http://www.cdc.gov/std/stats14/toc.htm>). Specifically, primary and secondary syphilis (known as infectious syphilis) rates for 2014 are the highest since 1994 (6.3 cases/100,000 population) with North Carolina ranked as the #9 highest incidence state in the country in 2014. After declines in Mecklenburg County from a high of 188 cases in 2006 to 91 cases in 2008, cases of primary, secondary and early latent syphilis increased to 269 in 2014. In the first nine months of 2015, 217 new cases were reported. As if the numbers are not sobering enough, an additional trend bears notice.

In addition to the concerns about increased syphilis rates, the CDC recently issued a clinical advisory regarding the emergence of ocular syphilis. Between December 2014 and March 2015, 12 cases of ocular syphilis were reported from San Francisco and Seattle. Subsequent case finding discovered more than 150 cases reported from

20 states during the last two years. Most cases have occurred among HIV-infected men who have sex with men (MSM), with several cases resulting in long-term vision problems, including blindness. Ocular syphilis is a clinical manifestation of neurosyphilis and can involve almost any eye structure. Posterior uveitis and panuveitis are the most common findings, with additional manifestations including anterior uveitis, optic neuropathy, retinal vasculitis and interstitial keratitis. The cases resulting in blindness have led to increased concern, and the situation is being actively investigated in order to determine whether or not strain differences or other unidentified co-factors are responsible for the more severe presentations documented recently (<http://www.cdc.gov/std/syphilis/clinicaladvisoryos2015.htm>).

Clinicians should be aware that the case definition of an ocular syphilis case is defined as “a person with clinical symptoms or signs consistent with ocular disease, with syphilis of any stage.” Clinical recommendations from the CDC include:

- Clinicians should be aware of ocular syphilis and screen for visual complaints in any patient at risk for syphilis (MSM, HIV-infected persons, others with risk factors and persons with multiple or anonymous partners).
- All patients with syphilis should receive an HIV test if status is unknown or previously HIV-negative
- Patients with positive syphilis serology and early syphilis without ocular symptoms should receive a careful neurological exam including all cranial nerves.
- Patients with syphilis and ocular complaints should receive immediate ophthalmologic evaluation.
- A lumbar puncture with cerebrospinal fluid (CSF) examination should be performed in patients with syphilis and ocular complaints.
- Ocular syphilis should be managed according to CDC treatment recommendations for neurosyphilis (<http://www.cdc.gov/std/tg2015/>)
- Cases of ocular syphilis should be reported to your state or local health department within 24 hours of diagnosis. Ocular syphilis cases diagnosed since December 1, 2014, should be reported through your local or state health department to CDC by email (email address [ocularsyphilis2015@cdc.gov](mailto:ocularsyphilis2015@cdc.gov)).
- If possible, pre-antibiotic clinical samples (whole blood, primary lesions and moist secondary lesions, CSF or ocular fluid) should be saved and stored at -80°C for molecular typing.

For more information, or to report cases of syphilis (including ocular syphilis) in Mecklenburg County, call (704) 336-3349 or (704) 614-2993. Clinical information about syphilis and other STDs can be obtained through the National Network of STD Prevention Training Center Consultation Line (<https://www.stdccn.org/>).

## Reporting Communicable Diseases – Mecklenburg County

To request N.C. Communicable Disease Report Forms, telephone 704.336.2817

Mark all correspondence “CONFIDENTIAL”

### Tuberculosis:

TB Clinic	980.314.9470
Mecklenburg County Health Department	FAX 704.432.2493
2845 Beatties Ford Road	
Charlotte, NC 28216	

### Sexually Transmitted Diseases, HIV, & AIDS:

Syphilis and HIV/AIDS Reporting	704.336.3349	or	704.614.2993
Other STD Reporting			704.432.1742
Mecklenburg County Health Department	FAX		704.336.6200
700 N. Tryon Street, Suite 214			
Charlotte, NC 28202			

### All Other Reportable Communicable Diseases including Viral Hepatitis A, B & C:

#### Report to any of the following nurses:

Freda Grant, RN	704.336.6436
Elizabeth Quinn, RN	704.336.5398
Belinda Worsham, RN	704.336.5490
Brian Lackey, RN	704.336.5498
Shawn Wilson, RN (CD/Child Care)	704.432.1975
Julie Secrest, RN	704.432.0069
Communicable Disease Control	FAX 704.353.1202
Mecklenburg County Health Department	
700 N. Tryon Street, Suite 271	
Charlotte, NC 28202	
Public Health Emergency 24/7 on call	704.432.0871

### Animal Bite Consultation / Zoonoses / Rabies Prevention:

Jose Pena	704.336.6440
Communicable Disease Control	FAX 704.353.1202
Mecklenburg County Health Department	
700 N. Tryon Street, Suite 214	
Charlotte, NC 28202	
State Veterinarian	919.733.3410
State after hours	919.733.3419

### Suspected Food borne Outbreaks / Restaurant, Lodging, Pool and Institutional Sanitation:

Food & Facilities Sanitation	(Mon-Fri)	704.336.5100
Mecklenburg County Health Department	(evenings; Sat/Sun)	704.432.1054
700 N. Tryon Street, Suite 208	(pager evenings; Sat/Sun)	704.580.0666
Charlotte, NC 28202	FAX	704.336.5306

**Mecklenburg County Health Department**

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